

as to safety and efficacy". These words were spoken in March 1966. Since that time even more evidence has come to light to indicate that this is a safe, effective compound and treatment for diseases for which we have no other effective treatment.

Sincerely,

STANLEY W. JACOB, M.D.,
Associate Professor, Department of Sur-
gery.

Mr. HATFIELD. Mr. President, despite the very impressive evidence outlined in Dr. Jacob's letter, DMSO is not only unavailable, but no application for its use as a prescription drug for humans is under consideration at the present time by the Food and Drug Administration. The last application by Squibb having been rejected in October of last year.

During 1970, as well as years preceding, I inquired frequently of the Food and Drug Administration as to the progress of DMSO applications. In July of 1970 DMSO was finally approved for use by veterinarians on horses. This was the first and last positive action by FDA on DMSO. Dr. J. Harold Brown, of Seattle, Wash., has completed two studies on DMSO that have been highly praised by the scientific community. The letter he sent me last August is a good example of many such letters I have received from scientists regarding DMSO. I ask unanimous consent that Dr. Brown's letter be printed at this point in the Record.

There being no objection, the letter was ordered to be printed in the Record, as follows:

SEATTLE, WASH.,
August 19, 1970.

HON. MARK O. HATFIELD,
U.S. Senate,
New Senate Office Building,
Washington, D.C.

DEAR SENATOR HATFIELD: Together with many qualified scientists from a multitude of specialties affiliated with medicine, it has been my privilege to have worked with Dimethyl Sulfoxide (DMSO) in clinical investigation. It is a unique medication, being absorbed through intact human skin, with the property of vehicularizing and transporting other effective therapeutic medication through that skin. DMSO itself is therapeutically effective. It is as great an addition to our therapeutic armamentarium, as was penicillin some 35 years ago.

My investigation of this drug has been practical and clinical. I have been impressed with its value in the treatment of many diverse conditions, but am particularly enthusiastic about its value in the treatment of acute musculoskeletal soft tissue disorders. My experience by double blind study into its efficacy, using it in pure form without additional vehicularized agents, has been scientifically documented. My most recent study was completed in 1969. I am presently preparing a scientific paper which will be published within the next six months. It will be completed soon. I will send you a copy of this paper prior to the time it is submitted for publication.

It is my understanding that one of our large and respected pharmaceutical houses has recently submitted an NDA for DMSO to the Food and Drug Administration. Recognizing the usual bureaucratic delays, review of this application may not occur for as long as three or four months and intolerable delays many ensue in bringing this medication to the prescription market for the use of physicians in more adequately treating their patients. I hope that prompt release of the drug for medical use can be effected so that

those who are sick and injured can benefit from this most effective and welcome addition to our therapeutic knowledge.

May I respectfully submit and urge that you pursue your present efforts to further its consideration and release by our Food and Drug Administration? In speaking for those professionals who have worked with this drug and know the therapeutic benefit that can be accomplished by intelligent application to patients under the direction of physicians, I emphasize our interest in the best traditions of medicine, outlined by the Hippocratic oath.

Thank you for your consideration of this correspondence.

Your very truly,

J. HAROLD BROWN, M.D.

Mr. HATFIELD. Mr. President, neither correspondence nor meeting with FDA officials have cleared the issue in my mind of why DMSO is not available to Americans. I have witnessed first hand, the suffering that has been relieved by use of DMSO. Daily I receive letters from Oregonians and people across the country desperate to obtain the drug for themselves or members of their families. I have listened at length to the researchers and doctors.

Since I have no scientific expertise, I cannot make an absolute statement that DMSO is indeed "a wonder drug of our century," but every bit of evidence I encounter reinforces the premise that it is.

Since the National Academy of Sciences has been at work for some years evaluating all drugs approved by FDA prior to 1962 and still on the market in 1966, I think it is entirely appropriate for the Congress to ask the National Academy to review DMSO. Perhaps a fresh look at the drug will produce a better explanation of what the status of DMSO really should be.

In view of the many dead ends and incomplete information of the FDA, the great frustration of scientists, doctors and patients alike, I introduce a joint resolution to place the entire question of DMSO before the National Academy of Sciences. It is offered in the spirit of seeking clarification and credibility for all parties concerned. I hope that my colleagues will support this resolution on behalf of the Americans who are suffering today from diseases untreatable by any other known substances, and those who may have need of this drug in the future.

I ask unanimous consent that the text of the joint resolution be printed at this point in the Record.

The PRESIDING OFFICER (Mr. Brock). The joint resolution will be received and appropriately referred; and, without objection, the joint resolution will be printed in the Record.

The joint resolution (S.J. Res. 30) to place the question of approval of dimethyl sulfoxide (DMSO) for human use as a prescription drug before the National Academy of Sciences, introduced by Mr. HATFIELD, was received, read twice by its title, referred to the Committee on Labor and Public Welfare, and ordered to be printed in the Record, as follows:

S.J. RES. 30

Whereas dimethyl sulfoxide (DMSO) has been an experimental drug in the United States since 1963;

Whereas four specific applications have

been made by three separate pharmaceutical firms to make DMSO a prescription drug for human use in this country, and none of the applications have been approved;

Whereas the scientific literature on DMSO as a drug is extensive making it one of the most thoroughly evaluated experimental drugs in medical history including well substantiated, controlled, and objective studies;

Whereas, according to many scientific determinations, DMSO is effective and safe treatment for diseases untreatable by other methods when used in specifically prescribed manners;

Whereas a careful study of the scientific literature shows that DMSO may possess great value in the investigation and treatment of many other disorders affecting man; and

Whereas the National Academy of Sciences is an appropriate agency to evaluate DMSO inasmuch as the Academy was selected in 1966 to serve in an advisory capacity to the Food and Drug Administration on the question of safety and efficacy of all drugs approved prior to 1962, and still on the market in 1966; Now, therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Health, Education, and Welfare shall have the National Academy of Sciences evaluate the safety and efficacy of dimethyl sulfoxide (DMSO) for human use as a prescription drug and report to the Congress the results of such evaluation within one year from the date of enactment of this joint resolution.

SEC. 2. (a) The Food and Drug Administration shall, upon request of the National Academy of Sciences, provide the Academy with any information concerning dimethyl sulfoxide (DMSO) that the Food and Drug Administration has in its custody.

(b) The Food and Drug Administration shall cease all studies and evaluations concerning dimethyl sulfoxide (DMSO) as soon as practicable after the date of enactment of this joint resolution.

SEC. 3. The necessary expenses incurred in carrying out the evaluation and report required under this joint resolution shall be paid out of funds appropriated to the Department of Health, Education, and Welfare.

Mr. HATFIELD. Mr. President, DMSO is an extract of lignin, the cement substance in the wood fiber of trees, it was first synthesized in 1866, and shelved as a scientific curiosity for nearly 80 years.

In 1950 many chemists declared it a good solvent for a number of substances. By one of those miraculous scientific accidents, Research Chemist Robert Herschler of the Crown Zellerbach Corp., and Dr. Stanley Jacob began to discover how DMSO might be applicable to humans.

Robert Herschler had noticed the highly penetrating quality in plants and trees. An explosion in the laboratory resulted in burns of Herschler's hands and face. Consequently, he offered himself as a "guinea pig" and the studies that the two had been conducting on mice were conducted on Herschler.

The burns treated with DMSO healed faster, with less scarring, the pain and swelling lessened in minutes in contrast to the untreated areas. It was only the beginning of many studies, cutting across many disease lines—just as antibiotics have been used in many ways.

DMSO is a simple substance, costing only about 35 cents a pint in the impure form. I believe we must give it better consideration. One can only wonder how much truth lies in a statement made by

Dr. Jacob when he remarked to me not long ago:

You might say that DMSO arrived in overalls at the servant's entrance. Its humble origin and unimpressive arrival on the medical scene was even a strike against it in some quarters.

ADDITIONAL COSPONSORS OF BILLS

S. 142

Mr. BYRD of West Virginia. Mr. President, in behalf of the Senator from Wyoming (Mr. McGEE), who is absent from this body on official business for the Appropriations Committee, I ask unanimous consent that, at the next printing, the name of the Senator from Colorado (Mr. DOMINICK) be added as a cosponsor of S. 142, a bill to amend the Gun Control Act of 1968 to permit interstate transportation and shipment of firearms used for sporting purposes and target competitions.

The PRESIDING OFFICER (Mr. BROCK). Without objection, it is so ordered.

S. 346

At the request of the Senator from Kansas (Mr. PEARSON), the Senator from Arizona (Mr. GOLDWATER), and the Senator from New York (Mr. JAVITS) were added as cosponsors of S. 346, the Rural Job Development Act of 1971.

S. 364

Mr. MANSFIELD. Mr. President, on behalf of the Senator from Utah (Mr. MOSS), I request that the Senator from New Jersey (Mr. WILLIAMS) be added as a cosponsor of S. 364, to strengthen the enforcement of the Flammable Fabrics Act and to authorize appropriations for fiscal years 1971, 1972 and succeeding fiscal years in order to carry out the purposes of the act.

S. 391

At the request of the Senator from Oregon (Mr. HATFIELD), the Senator from Nevada (Mr. CANNON), the Senator from Pennsylvania (Mr. SCOTT), the Senator from Wisconsin (Mr. NELSON), the Senator from Wyoming (Mr. McGEE), and the Senator from Florida (Mr. GURNEY), were added as cosponsors of S. 391, to amend section 306 of the Consolidated Farmers Home Administration Act to increase the aggregate annual limit on grants for water and waste facilities constructed to serve rural areas and to increase the aggregate annual limit on grants for plans for the development of such facilities.

S. 485

At the request of the Senator from Arizona (Mr. GOLDWATER), the Senator from Indiana (Mr. BAYH), the Senator from Kentucky (Mr. COOPER), the Senator from Oregon (Mr. HATFIELD), the Senator from Nebraska (Mr. HRUSKA), and the Senator from Texas (Mr. TOWER) were added as cosponsors of S. 485, to amend the Communications Act of 1934 to provide that certain aliens admitted to the United States for permanent residence shall be eligible to operate amateur radio stations in the United States and to hold licenses for their stations.

S. 497

At the request of the Senator from Oregon (Mr. HATFIELD), the Senator from Oregon (Mr. PACKWOOD) was added as a cosponsor of S. 497, to create one additional permanent district judgeship in Oregon.

S. 575

At the request of the Senator from West Virginia (Mr. RANDOLPH), the Senator from Minnesota (Mr. MONDALE), and the Senator from Iowa (Mr. HUGHES) were added as cosponsors of S. 575 to authorize funds to carry out the purposes of the Appalachian Regional Development Act of 1965, as amended.

ADDITIONAL COSPONSORS OF A JOINT RESOLUTION

S.J. RES 11

On behalf of the Senator from Oregon (Mr. HATFIELD), the Senator from Indiana (Mr. BAYH), the Senator from Texas (Mr. BENTSEN), the Senator from New York (Mr. JAVITS), the Senator from Wyoming (Mr. HANSEN), the Senator from West Virginia (Mr. RANDOLPH), the Senator from Virginia (Mr. SPONG), and the Senator from Illinois (Mr. STEVENSON) were added as cosponsors of Senate Joint Resolution 11, to authorize the President to proclaim the week of April 19, 1971, through April 23, 1971, as "Students' Week Against Drug Abuse."

SENATE CONCURRENT RESOLUTION 4—SUBMISSION OF A CONCURRENT RESOLUTION EXPRESSING THE SENSE OF CONGRESS ON THE EXPANDED USE OF THE MODEL CITIES PROGRAM

Mr. CHILES. Mr. President, I am very happy to join my distinguished colleague from Massachusetts (Mr. BROOKE) in submitting a concurrent resolution which could mean greater hope for the future of many of our Americans who are facing the despair of unemployment.

In this country there is a growing force of unemployed defense and aerospace scientists and technicians, as well as returning military veterans. These men have talents, skills, and a willingness to work which they have proven over and over in serving the needs of their country. It appears this force will continue to grow.

We cannot stand idly by and do nothing to help these people find the means of utilizing their capabilities, of providing for themselves and their families. I have seen firsthand the damage that is done to individuals and to communities in the vicinity of Kennedy Space Center in my home State of Florida; people who have done so much for all of us in the space program no longer employed and left with specialties that are not readily marketable today.

This resolution urges the administration to use funds already available in the model cities program to recruit, place, and train on the job up to 1,500 persons from the aerospace industry and 500 returning GI's. They would support local and State governments in their desperate need for qualified personnel to

deal with housing problems. It is hoped this would serve as a model which could be expanded to the extent of such need.

Mr. President, we already have the precedent and facilities for such a retraining program. We are not asking for new appropriations. I ask that we adopt the resolution encouraging the administration to pledge its full cooperation in carrying out the program.

The PRESIDING OFFICER (Mr. TUNNEY). The concurrent resolution will be received and appropriately referred.

The concurrent resolution (S. Con. Res. 4), which reads as follows, was referred to the Committee on Banking, Housing and Urban Affairs:

S. CON. RES. 4

Whereas the Congress authorized the Model Cities Program by Title I of the Demonstration Cities and Metropolitan Development Act of 1966; and

Whereas participating state and local governments have taken, through the Model Cities Program, significant steps to improve their capacity to effectively plan and manage the distribution of scarce public resources; and

Whereas one of the roadblocks impeding full achievement of Model Cities objectives as well as the objectives of other Federal programs is the difficulty of state and local governments in attracting qualified personnel; and

Whereas the large number of unemployed defense and aerospace related scientists and technicians and the growing number of "Vietnam era" GIs now being separated from the various services provides the Administration with significant opportunities to assist state and local governments in meeting existing and anticipated personnel needs; and

Whereas a number of Model Cities have initiated with success specific programs to retrain and hire returning GIs and whereas Model Cities initiated in the spring of 1970 an innovative pilot program which led to the recruitment and retraining of "non-urban trained" professionals for placement in positions with city governments throughout the country; and

Whereas it is proposed that the Model Cities Program be the vehicle to recruit, place and train on the job up to 1500 participants from the aerospace industry and 500 returning GIs in positions in state and local governments; and

Whereas the Model Cities sponsored program will provide the Federal government with a prototype model or system susceptible of replication: Now, therefore, be it

Resolved by the Senate of the United States (the House of Representatives concurring), That it is the sense of the Congress of the United States that the Model Cities Program should be used to develop and demonstrate a nationwide system to recruit, place and train on the job, out of work aerospace individuals and homeward bound servicemen, and place them in vacant positions in state and local governments, and that the Administration should pledge its cooperation at all levels in helping to carry out the program.

SENATE CONCURRENT RESOLUTION 5—SUBMISSION OF A CONCURRENT RESOLUTION TO ESTABLISH A JOINT COMMITTEE TO INVESTIGATE THE TREATMENT OF PRISONERS OF WAR IN VIETNAM

Mr. BROOKE. Mr. President, last year I was pleased to join with the distinguished junior Senator from West Virginia (Mr. BYRD) in proposing the crea-